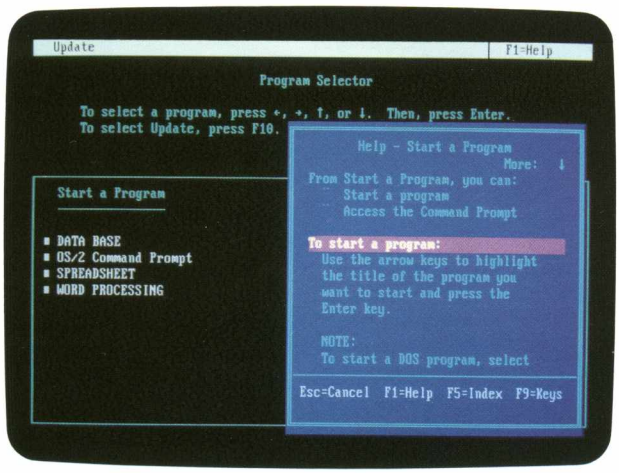
The next generation in personal computing

IBM Operating System/2 Standard and Extended Editions


Update
F1=Help
Program Selector
To select a program, press ←, →, ↑, or ↓. Then, press Enter.
To select Update, press F10.
Start a Program
DATA BASE
OS/2 Command Prompt
SPREADSHEET
WORD PROCESSING
Help - Start a Program
More: ↓
From Start a Program, you can:
Start a program
Access the Command Prompt
To start a program:
Use the arrow keys to highlight the title of the program you want to start and press the Enter key.
NOTE:
To start a DOS program, select
Esc=Cancel F1=Help F5=Index F9=Keys

IBM Operating System/2 provides easy-to-use program selection menus and online help at the touch of a key.

The next generation in operating systems

Support for multiple, concurrent applications, large memory addressability, enhanced ease-of-use facilities, and a lot more are yours with IBM Operating System/2™—IBM's strategic operating system for Personal System/2.™

Both the Standard and Extended Editions help you make the most of the capabilities of the 80286 or 80386 processors in your IBM computers. Start with Standard Edition Version 1.0 to reap the benefits of large memory, multitasking and system support. Then add windowing and graphics capabilities with Standard Edition Version 1.1—they're part of its special Presentation Manager component.

When your staff's needs grow and you require data base and communications support, simply move on to Extended Edition. With Version 1.0, you'll gain data base management services and the ability to run multiple concurrent communications sessions. You'll also gain network management and additional communications functions. With Version 1.1, you'll get all of these plus local area network (LAN) support and services. And you'll benefit from the windowing and graphics capabilities associated with the Presentation Manager as well.

Be part of the plan for software and hardware consistency. Operating System/2 is the first operating system to be released that participates in IBM's Systems Application Architecture (SAA)—a plan for common interfaces for software and consistent user interfaces for IBM hardware. Created to bring together IBM System/370, System/3X and personal computer environments, SAA—and as part of SAA, OS/2™—provide common user access guidelines and programming interfaces for communications and applications.

What this means is that you can expect OS/2 to offer common function keys, Help options, terminology and menus, so you have less to learn when moving from one type of program to another.

Have a large amount of memory available on demand. Both editions—and all versions—of OS/2 allow full use of up to 16MB of memory. With such a large amount of storage available, you can handle several different applications simultaneously.

And you can keep your most frequently used applications in memory at the same time. So, if you're in the middle of creating a pie chart with a graphing program, for example, and need to quickly check a figure in the chart, you can call up a file from a report-writing application.

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View many windows at one time. When you're working with several programs, you don't have to stop and save one before retrieving another. Just create multiple windows, boxed off in any size, and view them concurrently—even transfer data among them. It's all possible thanks to the Presentation Manager built into OS/2 Standard Edition Version 1.1 and Extended Edition Version 1.1.

In addition to allowing applications to run in a windowing environment, the Presentation Manager provides wide-ranging programming interfaces, ease-of-use facilities, a set of powerful graphics functions, and support for all-points-addressable displays, printers and plotters. It also offers special utilities for displaying or for converting picture files for interchange with other systems. So whether you're calling for a file or creating a complex application, the Presentation Manager simplifies your work by supporting and improving the way you interact with your system.

Bring host and network resources within reach. When you equip your system with Extended Edition, you can access the documents and files of another system or mainframe located miles away. What's more, you can access many IBM System/370 host applications right at your workstation and carry out advanced applications at the same time. That's because the Communications Manager portion of OS/2 Extended Edition integrates a wide variety of communications and network management capabilities in a single system—along with such basic OS/2 benefits as multitasking capability, large memory access, and enhanced ease of use.

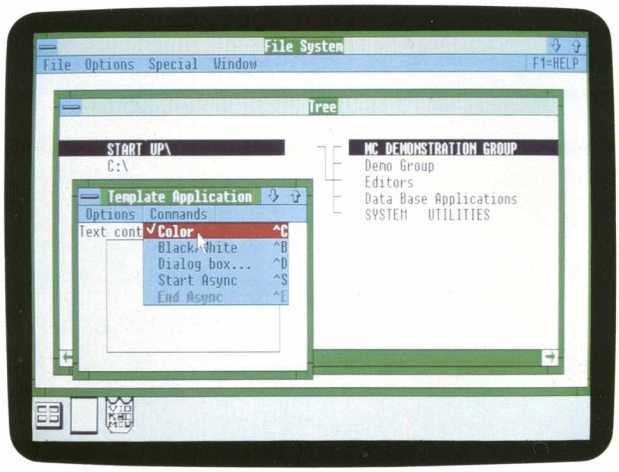
From a communications standpoint, this feature offers the kind of flexibility that lets you keep pace with changing needs. And it provides a path to higher productivity, too.

No longer do you have to wait for one communication session to complete before starting another—with the Communications Manager, you can support several types of sessions at a time. And you can be in touch with other systems using a wide range of communications technologies and protocols, including Synchronous Data Link Control, Distributed Function Terminal mode, IBM Token-Ring and PC Network links, and more.

In addition to helping you communicate with a variety of systems concurrently, the Communications Manager provides other facilities that expand your capability and help work flow smoothly in your connected environment. These include 3270/5250/Async terminal emulation, file transfer capability, network and system management support, and functions for gathering and processing problem-determination data.

Build a comprehensive data base. When you use Extended Edition, you get another plus: support for a relational data base. You can use the Database Manager component of Extended Edition to work with or even create a relational data base that is consistent with IBM DB2, SQL/DS and QMF—and that operates under the IBM-developed Structured Query Language (SQL). If you're already familiar with this language, you can use SQL commands to query the data base. Or you can follow a prompted interface to create a data base, retrieve data and generate reports.

The Database Manager uses IBM data base technology to optimize performance in single- or multiuser environments. This technology ensures integrity of the data base and provides for future access to IBM host relational data base products.



The OS/2 Presentation Manager feature simplifies and improves the way you interact with your system.

If you're interested in developing an application, the Database Manager allows you to create your own panels, menus and procedures. And you can use them in conjunction with the Database Manager's SQL programming interface, OS/2 programming languages, and SAA Query Interface facility to build a complete, interactive data base application.

Keep working with DOS software or develop applications for OS/2. Whether you choose Standard or Extended Edition, you can continue to run many of the PC programs you currently use because both editions have a built-in DOS application mode. You may, for example, be able to keep using the accounting or word processing programs the rest of the company is using.

With Operating System/2, you can also continue developing programs in the languages available under DOS: BASIC Compiler/2, C/2, FORTRAN/2, Pascal Compiler/2, COBOL/2 and Macro Assembler/2. And with help from the newest language compilers available, you can choose to run some programs in either the OS/2 or the DOS application mode.

OS/2 Standard and Extended Editions incorporate programming interfaces to help increase productivity and simplify the process of writing new applications. These interfaces can help you migrate from existing DOS applications, handle the presentation of data on the screen, establish common access procedures and communication support, and achieve consistency of data base applications.

Programming interfaces provided with OS/2 Standard Edition include:

- Presentation Interface—for presentation of text and graphic data and for windowing control
- Video input/output interface—for simple text display
- Interprocess communication interface—for intertask synchronization and communication
- Memory and task management interfaces—for high-function, multitasking applications

Programming interfaces provided with OS/2 Extended Edition include:

- SQL application programming interface—for high-level data definition and manipulation in data base applications

- Advanced Program-to-Program Communication Programming (APPC) interface—for peer-to-peer interaction and communication with a variety of IBM systems
- Server-Requester Programming Interface (SRPI)—for communications-independent requester program calls to a server program
- Asynchronous Communications Device Interface (ACDI)—for exchange of data between applications over asynchronous communications links
- 3270 Entry Emulator High Level Language Application Program Interface (EEHLLAPI)—for simplification of existing host applications via programmed operation functions (a planned enhancement)
- IBM NETBIOS and IEEE 802.2 Data Link Control programming interface—for communicating across IBM LANs

Highlights

The following are several important features offered by IBM Operating System/2.

80286/80386 architecture support helps you create and run sophisticated applications that take advantage of IBM hardware built with 80286 and 80386 microprocessors.

Memory management and multitasking capabilities allow you to perform many operations simultaneously so you can use your time efficiently.

16MB memory addressability lets you develop and run very large applications that include online documentation, large data requirements, and high functions.

Enhanced ease-of-use facilities use menus to provide a convenient way to switch from one application to another.

Consistent programming interfaces provide the basis for creating applications that operate similarly to each other and to OS/2—so that users who know how one application works can more easily familiarize themselves with others.

Windowing and graphics functions allow you to view text or graphic data from multiple applications.

Presentation device independence means you only need to install one device driver for programs to exploit your pointing device or display.

Extended Edition's communications functions put you in touch with the documents and files of other systems and mainframes.

Extended Edition's Database Manager provides functions that allow you to create a relational data base and run applications using the IBM-developed SQL.

Extended Edition's LAN support opens the way to functions provided by the OS/2 LAN Server Program Version 1.0.

Contextual online help gives you assistance to complete the task at hand.

DOS application mode makes it possible to continue using many DOS-based programs you already own without rewriting code.

SAA participation provides guidelines for consistency across applications and system environments.

What you get

IBM Operating System/2 Standard and Extended Editions come with 3.5-inch or 5.25-inch diskettes and associated publications.

Options

Two separately available offerings can help you use both editions of Operating System/2 to design your own applications:

- IBM Operating System/2 Programmer Toolkit
- IBM Operating System/2 Technical Reference

Programming languages

Whether you want to design a spreadsheet, build a model, or create a data base, there's an IBM programming language suited to the task—and supported by OS/2. The range of languages you can work with includes:

- IBM C/2—the full-function language with new enhancements for the OS/2 environment
- IBM COBOL/2—for business applications with access to OS/2 functions and support for multiple memory models
- IBM FORTRAN/2—for scientific and engineering applications in a multitasking environment
- IBM Macro Assembler/2—for improved application performance and concurrent operation of applications
- IBM Pascal Compiler/2—structured programming facilities and extensive data structures to help you create and execute Pascal programs in the OS/2 environment
- IBM BASIC Compiler/2—for writing, testing and running BASIC programs under OS/2

IBM C/2, COBOL/2 and FORTRAN/2 are participants in Systems Application Architecture.

IBM Operating System/2 features

Feature	Function	Benefit
16MB addressable memory support	Enables developers/users to take full advantage of memory beyond 640KB for applications and data	Capability to use functionally rich applications, such as spreadsheets and advanced word processing programs, that can process large amounts of data
Concurrent processing of multiple applications	Allows multitasking and fast, easy switching among applications	Increased productivity and user convenience
High-level programming interface	Provides application developers with an interface that will be compatible across all versions of OS/2	Consistent platform for application development across versions of OS/2
Enhanced ease-of-use facilities	Offer comprehensive help information and descriptive system messages	Quicker learning for computer novices; simplified operations for beginners and experienced users alike
DOS compatibility	Includes a DOS environment that allows many existing DOS applications to run unchanged	Protection of investment in DOS applications, smooth transition from DOS to OS/2
Presentation Manager	Provides windowing and graphics functions along with a consistent interface for applications	Improved productivity; greater transfer of skills; faster, easier application development
Communications Manager	Puts comprehensive communications capability in a single computer	Flexibility to receive and send data through multiple concurrent communications over a wide range of connections
Database Manager	Offers facilities for developing and working with a relational data base; also provides a common interface across host systems and personal computers	Greater convenience in designing, creating and accessing a data base; application portability across systems
Enhanced warranty and service	Provide 3-month warranty coverage and a 12-month service plan	Protection of investment in OS/2, increased reliability, availability and serviceability

Programming tools

The IBM Operating System/2 Programmer Toolkit is available to help boost your productivity in developing applications for the OS/2 environment.

IBM Operating System/2 Programmer Toolkit Releases 1.0 and 1.1 correspond to OS/2 Standard Edition Versions 1.0 and 1.1. Highlights of this programming toolkit include:

- Graphics and windowing tools such as a font editor, an icon editor, and more (Standard Edition 1.1 only)
- Facilities for creating dynamic link libraries and family applications
- Programming aids for IBM Macro Assembler/2 and C/2
- Message preparation utilities
- Sample programs illustrating useful programming techniques

Warranty/Service

IBM Operating System/2 is designed to meet IBM's high standards of quality and reliability.

Each Operating System/2 offering is backed by an enhanced warranty and service plan. The no-charge service plan is available after the three-month warranty expires and extends up to 12 months after first shipment.

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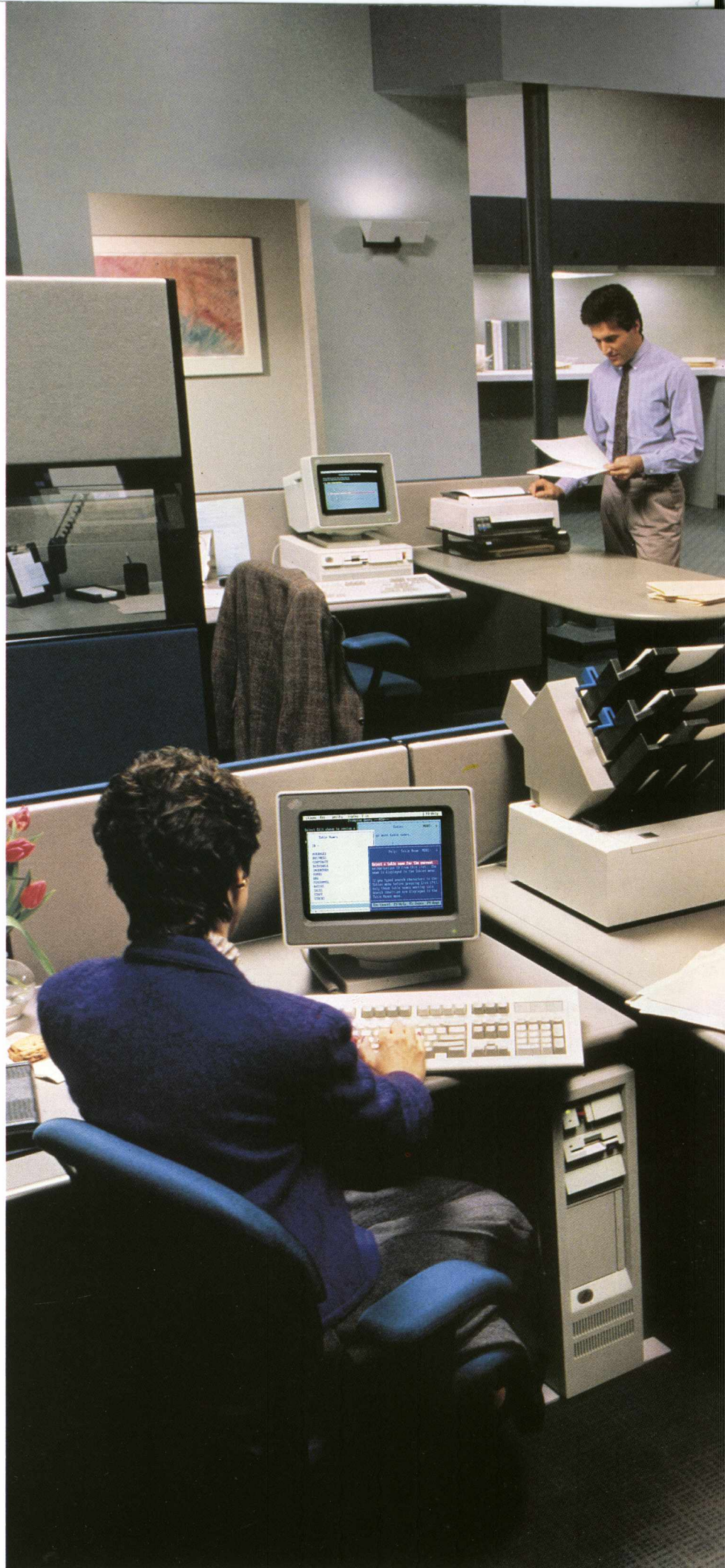
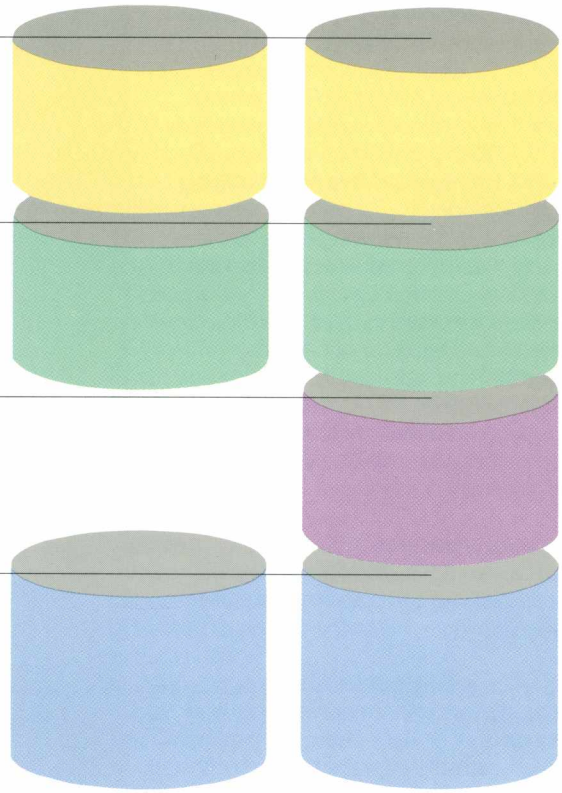
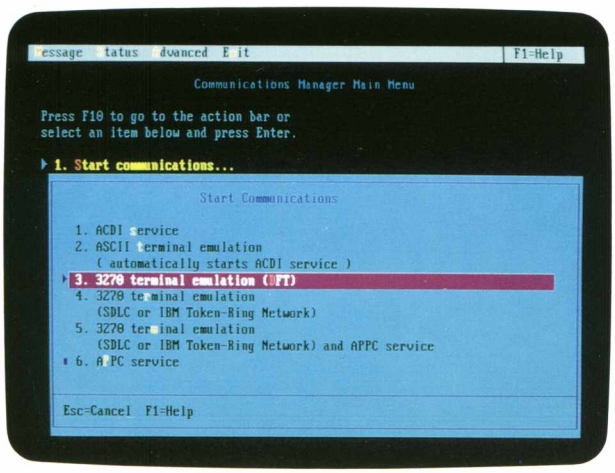


From smooth communications to built-in data base operations, OS/2 opens the way to higher productivity for users throughout your company.

IBM Operating System/2 at a glance



	Standard Edition 1.0	Standard Edition 1.1	Extended Edition 1.0	Extended Edition 1.1
Communications Manager	Support for a variety of multiple concurrent communications sessions			
Database Manager	Relational data base with query management, report generation and additional functions			
Presentation Manager	Built-in windowing, graphics and clipboard functions; common user interface			
Standard Edition				
Addressable memory	Up to 16MB for multiple applications and for large applications that incorporate online documentation and extensive functions			
Multitasking	Concurrent processing; fast, easy switching among applications			
Ease-of-use facilities	Online overview, contextual help, on-screen messages			
Languages supported	IBM C/2, COBOL/2, FORTRAN/2, Macro Assembler/2, Pascal Compiler/2, BASIC Compiler/2			
Enhanced file support		Files and partitions of 32MB or more		Files and partitions of 32MB or more
Systems supported	IBM Personal System/2 Models 50, 60, 80; Personal Computer AT® and Personal Computer XT™ Model 286 systems			


essage tatus dvanced E it
F1=Help
Communications Manager Main Menu
Press F10 to go to the action bar or
select an item below and press Enter.
1. Start communications...
Start Communications
1. ACDI service
2. ASCII terminal emulation
(automatically starts ACDI service)
3. 3270 terminal emulation (DFT)
4. 3270 terminal emulation
(SDLC or IBM Token-Ring Network)
5. 3270 terminal emulation
(SDLC or IBM Token-Ring Network) and APPC service
6. APPC service
Esc=Cancel F1=Help

With Extended Edition's Communications Manager, you can support multiple sessions with a variety of systems.

Operating System/2 connectivity summary

Supported systems	Interface or emulation	Protocol	File transfer	Link[1]
IBM System/370 architecture including 9370	APPC	LU6.2		SDLC (3720, 3725, 3705, 3726 and 9370 Integrated Controller) Token-Ring[2] (3720, 3725, 3726 and 9370 Integrated Controller) Token-Ring[2] using 3174's 3270 Gateway Feature (#3025) for PU2.0
	SRPI	LU2		DFT via 3174/3274 (to SDLC, BSC or channel and 9370 Workstation Controller) SDLC (3720, 3725, 3705, 3726 and 9370 Integrated Controller) Token-Ring[2] (3720, 3725, 3726 and 9370 Integrated Controller) Token-Ring[2] using 3174's 3270 Gateway Feature (#3025) for PU2.0
	3270	LU2	3270-PC File Transfer Program	DFT via 3174/3274 (to SDLC, BSC or channel and 9370 Workstation Controller) SDLC (3720, 3725, 3705, 3726 and 9370 Integrated Controller) Token-Ring[2] (3720, 3725, 3726 and 9370 Integrated Controller) Token-Ring[2] using 3174's 3270 Gateway Feature (#3025) for PU2.0
	3101, VT100		3270-PC File Transfer Program	Async[3]
IBM Personal System/2 and IBM PC	APPC	LU6.2		SDLC, Token-Ring[2], PC Network[2]
			XMODEM, ASCII	Async
IBM System/36	APPC	LU6.2		SDLC, Token-Ring[2]
IBM System/38 and IBM System/88	APPC	LU6.2		SDLC
IBM Series/1	APPC	LU6.2		SDLC
	3101			Async
IBM RT PC	APPC	LU6.2		SDLC
	VT100		XMODEM	Async
Other hosts[4]	VT100		XMODEM, ASCII	Async
	3101[5]		XMODEM, ASCII	Async

[1] *The OS/2 Extended Edition Communications Manager will support combinations of these links subject to the limitations imposed by installed adapters, memory size and processor capacity. All supported SNA links are sharable by applications which may use up to ten 3270 display sessions (via SDLC or Token-Ring link with up to five, and DFT link with up to five) per workstation. Multiple concurrent SNA LU6.2 sessions per logical unit are supported over remote SDLC or local Token-Ring LAN links. Asynchronous links are serially usable.*

[2] *Available in OS/2 Extended Edition Version 1.1.*

[3] *Asynchronous users requiring SNA support must use a protocol converter on the link.*

[4] *Appropriately programmed.*

[5] *Character mode.*

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